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116TH CONGRESS
2D SESSION

H. R. 7417

To direct the Secretary of Defense to set sustainability goals for the Department of Defense, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 30, 2020

Mr. CASTEN of Illinois introduced the following bill; which was referred to the Committee on Armed Services

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A BILL

To direct the Secretary of Defense to set sustainability goals for the Department of Defense, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''National Security Resiliency and Sustainability Act of 2020''.

SEC. 2. RESILIENCY AND SUSTAINABILITY GOALS FOR THE DEPARTMENT OF DEFENSE.

(a) IN GENERAL.—For fiscal year 2021 and any subsequent fiscal year, the Secretary of Defense shall—

(1) reduce energy intensity (measured in British thermal units per gross square foot) in buildings of the Department by 2.5 percent annually through the end of fiscal year 2027, relative to the baseline energy use in buildings of the Department in 2008 by implementing efficiency measures.

(2) improve data center energy efficiency at Department facilities by—

(A) ensuring the chief information officer of the Department promotes energy optimization, efficiency, and performance in data centers;

(B) installing and monitoring advanced energy meters in all data centers by 2023; and

(C) establishing a power usage effectiveness target of 1.2 to 1.4 for new data centers and less than 1.5 for existing data centers;

(3) ensure that electric energy and thermal energy in Department buildings are comprised of clean energy, in amounts—

(A) not less than 28 percent for fiscal years 2028 and 2029;

(B) not less than 33 percent for fiscal years 2030 and 2031;

(C) not less than 37 percent for fiscal years 2032 and 2033;

(D) not less than 39 percent for fiscal years 2034 and 2035;

(E) not less than 42 percent for fiscal years 2036 and 2037; and

(F) not less than 45 percent for fiscal year 2038 and each year thereafter;

(4) ensure that the percentage of the total amount of electric energy consumed by the Department that is clean energy is—

(A) not less than 28 percent for fiscal year 2025;

(B) not less than 30 percent for fiscal years 2026 and 2027;

(C) not less than 33 percent for fiscal years 2028 and 2029;

(D) not less than 37 percent for fiscal years 2030 and 2031;

(E) not less than 40 percent for fiscal years 2032 and 2033;

(F) not less than 43 percent for fiscal years 2034 and 2035;

(G) not less than 46 percent for fiscal years 2036 and 2037; and

(H) not less than 50 percent for fiscal year 2038 and each year thereafter;

(5) ensure that all clean energy capacity added between 2021 and 2040 comes from sources based on projects that are not in operation as of the date of the installation or signing of any financial agreement for the purchase of the clean electric or thermal energy;

(6) include in the electric energy portion of the clean energy requirements established in paragraphs (3) and (4), and retain all renewable energy certificates and clean energy attributes for, clean electric energy associated with—

(A) installing clean energy on site at Department facilities;

(B) contracting for the purchase of energy, which includes—

(i) the installation of renewable energy on site at a Department facility or off site from a Department facility; and

(ii) the installation of clean energy operating or owned by a third party on site of a Department facility that is directly serving local loads, and for which the facility has a commitment to procure, for a

contract period of not less than 10 years and up to a period of 40 years, the lesser of—

(I) 100 percent of clean energy asset output; or

(II) 100 percent of facility energy needs; and

(iii) a contract for differences with a minimum off-take period of 10 years, and up to a period of 40 years, for the installation of clean energy not physically located on site at a Department facility nor electrically connected to the facility, for which the department agrees to procure the energy (in MWh), as well as corresponding renewable energy certificates, and clean energy attributes, at a defined price for the period of the contract;

(7) include, in the thermal electric energy portion of the clean energy requirement established in paragraph (3), clean energy associated with—

(A) installing thermal clean energy on site at Department facilities and retaining corresponding renewable and clean attributes; and

(B) fulfilling the requirements of the energy policy of the Department as provided in section 2911 of title 10, United States Code;

(8) improve water use efficiency and management, including stormwater management, by—

(A) reducing potable water consumption intensity, measured in gallons per gross square foot, by 36 percent by fiscal year 2025 through reductions of 2 percent annually through fiscal year 2025 relative to a baseline of the water consumption of the Department in fiscal year 2007;

(B) installing water meters and collecting and using building and facility water balance data to improve water conservation and management;

(C) reducing the industrial, landscaping, and agricultural water consumption, measured in gallons, by 2 percent annually through fiscal year 2025 relative to a baseline of the industrial, landscaping, and agricultural water consumption of the Department during fiscal year 2010; and

(D) installing appropriate green infrastructure features on Department property to help with stormwater and wastewater management;

(9) improve building efficiency, performance, and management by—

(A) ensuring, for fiscal year 2021 and each subsequent fiscal year, that the new construction of any Department building larger than 5,000 gross square feet that enters the planning process is designed to achieve energy net-zero and, water or waste net-zero by fiscal year 2035;

(B) identifying, beginning in fiscal year 2021, as part of the planning requirements of section 3, a percentage of at least 15 percent, measured by number or total square footage, of the existing Department buildings larger than 5,000 gross square feet that will, by fiscal year 2030, comply with the revised Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles), and will reach 100 percent conformance with the Guiding Principles for building inventory by 2050;

(C) identifying, as part of the planning requirements of this section, a percentage of the existing buildings of the Department that are larger than 5,000 gross square feet and intended to be energy, waste, or water net-zero buildings by fiscal year 2030, and implementing actions that will allow those buildings to meet that target;

(D) including in all new Department lease solicitations for buildings or facilities larger than 10,000 rentable square feet—

(i) criteria for energy efficiency either as a required performance specification or as a source selection evaluation factor in best-value tradeoff procurements; and

(ii) requirements for building lessor disclosure of carbon emission or energy consumption data for any portion of the building occupied by the Department that may be provided by the lessor through submetering or estimation from prorated occupancy data, whichever is more cost-effective;

(E) including in the planning for new buildings or leases cost-effective strategies to

optimize sustainable space usage and consideration of existing community transportation planning and infrastructure, including access to public transit; and

(F) including the incorporation of climate-resilient design and management elements into the operation, repair, and renovation of existing Department buildings and the design of new Department buildings;

(10) promote sustainable acquisition and procurement by ensuring that environmental performance and sustainability factors are included for all applicable procurements in the planning, award, and execution phases of the acquisition by—

(A) preferentially purchasing—

(i) recycled content products designated by the Environmental Protection Agency;

(ii) energy and water efficient products and services identified by the Environmental Protection Agency and the Department of Energy; and

(iii) BioPreferred and biobased products, as designated by the Department of Agriculture;

(B) purchasing sustainable products and services identified by the Environmental Protection Agency;

(C) purchasing products or services that—

(i) meet or exceed specifications, standards, or labels recommended by the Environmental Protection Agency that have been determined to assist agencies in meeting their needs and further advance sustainable procurement goals; or

(ii) meet environmental performance criteria developed or adopted by voluntary consensus standards bodies consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note(d));

(D) acting, as part of the implementation of planning requirements under section 3, until the Department achieves at least 95 percent compliance with the BioPreferred and biobased purchasing requirement in this paragraph, to—

(i) establish annual targets for the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased

products to be delivered and reported under those contracts in the following fiscal year, by considering—

(I) the dollar value of designated BioPreferred and biobased products reported in previous years;

(II) the specifications reviewed and revised for inclusion of BioPreferred and biobased products; and

(III) the number of applicable product and service contracts to be awarded, including construction, operations and maintenance, food services, vehicle maintenance, and janitorial services; and

(ii) ensure contractors submit timely annual reports on BioPreferred and biobased purchases; and

(E) reducing copier and printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent post-consumer recycled content or greater; and

(11) implement energy savings performance contracts for Department buildings by—

(A) using energy savings performance contracting as a tool to help meet energy efficiency and management goals while implementing life-cycle cost-effective energy efficiency and clean energy technology and water conservation measures; and

(B) providing annual Department targets for performance contracting for energy savings for fiscal year 2021 and subsequent fiscal years as part of the planning requirements of section 3.

(b) STRATEGIC SUSTAINABILITY PERFORMANCE PLAN.—For each of fiscal years 2021 through 2040, the Secretary of Defense shall develop, implement, and annually update an integrated Strategic Sustainability Performance Plan for the Department. Not later than 180 days before the end of the fiscal year, each year the Secretary shall submit to Congress the plan for the Department for the subsequent fiscal year. Each such plan shall be made publicly available on the website of the Department.

(c) LIMITATIONS.—This section shall apply with respect to activities, personnel, resources, and facilities of the Department that are located within the United States. The Secretary of Defense may provide that this section

shall apply in whole or in part with respect to the activities, personnel, resources, and facilities of the Department that are not located within the United States, if the Secretary determines that such application is in the interest of the United States.

(d) WAIVER AUTHORITY.—

(1) IN GENERAL.—The Secretary of Defense may waive the requirements of this section with respect to a particular activity or facility of the Department if the Secretary determines such a waiver is in the national security interests of the United States.

(2) NOTICE.—Not later than 30 days after the Secretary issues a waiver under subsection (a), the Secretary shall submit to the chair and ranking member of the Committees on Armed Services of the Senate and House of Representatives notice of the waiver and the reason for the waiver.

(e) DEFINITIONS.—In this section:

(1) The term ''advanced energy meters'' means those energy meters that meet the requirements for certification as defined by the Leadership in Energy and Environmental Design (LEED) program as maintained by the U.S. Green Building Council (USGBC).

(2) The term ''average greenhouse gas intensity of power generation on the United States electric grid'' means the total net greenhouse gas emissions from the electricity sector in the previous fiscal year as measured in carbon dioxide equivalents and determined by the Energy Information Administration in consultation with the Environmental Protection Agency, divided by the national net power generation over the same period as determined by the Energy Information Administration.

(3) The term ''best-value tradeoff procurements'' means a process by which the Government considers whether it is in the best interest of the Government to award a contract to an entity other than the lowest price offeror or other than the highest technically rated offeror based on established evaluation factors.

(4) The term ''clean energy'' means any energy produced by a generation project that is at least 50 percent less greenhouse gas intensive on a marginal basis as measured by carbon dioxide equivalents per megawatt-hour than the average greenhouse gas intensity of power generation on the United States electric grid over the previous fiscal year at the time of contracting.

(5) The term ''clean energy attributes'' means the technology and non-energy attributes that represent proof that 1 megawatt-hour of electricity was generated from an eligible clean energy resource, that can be sold separately from the underlying generic electricity with which they are associated by sources of clean energy placed into service within 10 years prior to the start of the fiscal year.

(6) The term ''climate resilient design'' means to design assets to prepare for, withstand, respond to, or quickly recover from disruptions due to severe weather events and climate change for the intended life of the asset.

(7) The term ''Department facility'' means any building or collection of buildings, grounds, or structures, as well as any fixture or part thereof, which is owned by the Department of Defense or that is held by the Department under a lease-acquisition agreement under which the Department will receive fee simple title under the terms of such agreement without further negotiation.

(8) The term ''energy net zero'' means a building where the total energy used by the building on an annual basis is equal to the amount of clean energy created in site.

(9) The term ''equal value replacement renewable energy certificates'' means a quantity of renewable energy certificates equal to the number of megawatt-hours of clean electricity generated from an eligible renewable energy resource.

(10) The term ''greenhouse gas'' means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen triflouride, sulfur hexafluoride, and any other substance so identified by the Administrator of the Environmental Protection Agency.

(11) The term ''greenhouse gas intensity on a marginal basis'' means the marginal fossil fuel use multiplied by the lower heating value of the fossil fuel, as defined by the Energy Information Administration, multiplied by the carbon dioxide emissions coefficients of the fossil fuel, as defined by the Energy Information Administration. If a project uses no fossil fuel, the marginal greenhouse gas emissions are defined as zero.

(12) The term ''green infrastructure features'' means features of infrastructure which use natural hydrologic features to manage water and provide environmental and community benefits.

(13) The term ''life-cycle cost-effective'' means the costs of a product, project, or measure during the life of the product, project, or measure are estimated to be equal to or less than the current or standard practice or product.

(14) The term ''marginal greenhouse gas emissions'' means the marginal fossil fuel use multiplied by the lower heating value of the fossil fuel, as defined by the Energy Information Administration, multiplied by the carbon dioxide emissions coefficients of the fossil fuel, as defined by the Energy Information Administration. If a project uses no fossil fuel, the marginal greenhouse gas emissions are defined as zero.

(15) The term ''marginal fossil fuel use'' means the fossil fuel combusted to produce energy by the project, measured in metric tons per year, minus any existing fossil combustion, measured in metric tons per year, within the same system that is determined by the Administrator of the Environmental Protection Agency in consultation with the Secretary of Energy and Administrator of the Energy Information Administration to be necessary to the production of the contracted energy generation and

would have been consumed regardless of the addition of the contracted energy generation.

(16) The term ''energy savings performance contract'' means a contract that—

(A) provides for the performance of services for the design, acquisition, installation, testing, and, where appropriate, operation, maintenance, and repair, of an identified energy conservation measure or series of measures at 1 or more locations; and

(B) with respect to an agency facility that is a public building (as such term is defined in section 3301 of title 40, United States Code), is in compliance with the prospectus requirements and procedures of section 3307 of title 40, United States Code.

(17) The term ''power usage effectiveness'' means the ratio obtained by dividing the total amount of electricity and other power consumed in running a data center by the power consumed by the information and communications technology in the data center.

(18) The term ''renewable attributes'' means the environmental benefits associated with 1 mega-

watt-hour of electricity generated from a renewable energy resource.

(19) The term ''renewable energy certificate'' means the technology and non-energy attributes that represent proof that 1 megawatt-hour of electricity was generated from an eligible renewable energy resource, that can be sold separately from the underlying generic electricity with which they are associated and were produced by sources of renewable energy placed into service within 10 years prior to the start of the fiscal year.

(20) The term ''resiliency'' means the ability to maintain or quickly restore functionality or use of applicable infrastructure following a disruptive external event including, but not limited to, severe storms, extreme heat, flooding, and earthquakes.

(21) The term ''source selection evaluation factor'' means factors an agency uses to determine which of several competing proposals submitted in response to an request for proposal would best meet the agency's needs.

(22) The term ''sustainability'' means a measure of the ability of a development, infrastructure project, or of general Department operations to meet current operational needs without compromising the

ability of future generations to meet these needs through the depletion of strategic resources, long-term environmental harm or pollution, contributing to an unsafe climate, or any other measures as deemed by the Secretary with consultation from the Administrator of the Environmental Protection Agency and Chair of the Council on Environmental Quality.

(23) The term ''United States'' means the fifty States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands, and associated territorial waters and airspace.

(24) The term ''waste net zero'' refers to any building which through the reduction, reuse, recycling, composting, or recovery of solid waste streams (with the exception of any hazardous materials or medical waste) results in the elimination of any waste that is sent for disposal to landfills or incinerators.

(25) The term ''water balance'' means a comparison of the water supplied to a defined system to the water consumed by that system in order to identify the proportion of water consumed for specific

end-uses and ensure potential water leaks in the system are addressed.

(26) The term ''water net zero'' means any building which returns water to the original water source such that the annual water consumption is equivalent to the alternative water use plus water returned to the original source over the course of a year through practices that minimize total water consumption, maximize alternative water sources, and minimize wastewater discharge from the building.

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